

## Key Stage 4 Curriculum Map 2021 - 2022

### Term 3

Subject: Physics	Year: 10		
Focus/Topic	UAE Links	HPL Links	Home Learning / Reading
<ul style="list-style-type: none"> <li>• 7.1 Nature of Waves</li> <li>• 7.2 Measuring Waves</li> <li>• 7.3 Refraction and Reflection</li> </ul>	Measure the speed of a wave, Laguna waterpark	<b>VAA: Empathetic</b> Collaborative: Students will be working together and collaborating with each other, sharing ideas and being empathetic.  <b>ACP: Analysing</b> Critical thinking: Students will work hard, analyse, link previous knowledge to new knowledge realise and create graphs, diagrams and answers to exam questions.  <b>VAA: Agile</b> Enquiring: Student will be curious and can work independently to control their own learning showing they have practiced enquiring	Guided reading
<ul style="list-style-type: none"> <li>• 7.4 Diffraction</li> <li>• 8.1 EM Spectrum</li> <li>• 8.2 Light, Infrared, Microwaves and Radiowaves</li> </ul>	Museum of illusions, Al Seef, Dubai Creek, Etisalat, Du Optical fibers		Guided reading
<ul style="list-style-type: none"> <li>• 8.3 Communications</li> <li>• 8.4 UV, X-rays and Gamma rays</li> <li>• 8.5 X-rays in Medicine</li> </ul>	Sun and radiation in the UAE		Guided reading
<ul style="list-style-type: none"> <li>• 9 Sound and Ultrasound</li> <li>• Revision</li> <li>• Test for waves</li> </ul>	Hospitals, X-rays and ultrasound in Dubai		Guided reading
<ul style="list-style-type: none"> <li>• Test review</li> <li>• 10.1 Reflection</li> <li>• 10.2 Refraction</li> </ul>	Mirages in Dubai		Guided reading
<ul style="list-style-type: none"> <li>• 10.3 Refractive index</li> <li>• 10.4 Total internal reflection</li> <li>• 11.1 Ray diagrams and concave and convex Lenses</li> </ul>	How do glass buildings in the UAE not reflect light onto drivers?		Guided reading

<ul style="list-style-type: none"> <li>• 11.2 The human eye</li> <li>• Test for light</li> <li>• Test review</li> </ul>	How is the eye of the falcon different to a human?	<p><b>ACP: Linking</b> Connection finding: Students will find connections between different topics within science and therefore be able to give more detailed explanations</p> <p><b>VAA: Hardworking</b> Students will have to show resilience and perseverance when completing their guided reading and all the tasks in the classroom</p>	Guided reading
<ul style="list-style-type: none"> <li>• 12.1 States of Matter</li> <li>• 12.2 Changes of State</li> <li>• 12.3 Specific Heat Capacity</li> </ul>	What element can be found in 3 different states in the UAE?		Guided reading
<ul style="list-style-type: none"> <li>• 12.4 Specific Latent Heat</li> <li>• 12.4 Cooling curve required practical write up</li> <li>• 12.4 Cooling curve required practical</li> </ul>	Why is the sea always cooler than the air?		Guided reading
<ul style="list-style-type: none"> <li>• Topics 1,2 Revision</li> <li>• Topics 3,4 Revision</li> <li>• Topics 5,6 Revision</li> </ul>	Steel is used extensively in skyscrapers. What is the cooling curve of the UAE?		Guided reading
<ul style="list-style-type: none"> <li>• Topics 7,8,9 Revision</li> <li>• Topics 10,11 Revision</li> <li>• Topic 12 Revision</li> </ul>	What forces is the Burj Khalifa built to withstand?		Guided reading
<b>End of term 3</b>			